

California Schools Wiring Video Review Questions

1. **According to one recent magnetic field survey, what percentage of California schools have at least one mis-wired circuit?**
 - A. 20%
 - B. 40%
 - C. 60%
 - D. None of the above
2. **Unbalanced or "net" currents are a potential fire and electrical shock hazard.**
 - A. True
 - B. False
3. **What is the most common cause of elevated magnetic fields in schools?**
 - A. Mis-connected neutrals
 - B. Computers
 - C. Power lines
 - D. All of the above
4. **The neutral bus must be solidly grounded:**
 - A. At the service entry panel only
 - B. At the electrical sub-panels only
 - C. Both A & B above
 - D. None of the above
5. **"Net" currents will increase Magnetic Fields and can cause:**
 - A. Computer interference
 - B. "Noise" in audio equipment
 - C. Pre-mature conductor aging due to heating
 - D. All of the above
6. **Connecting separate branch line neutrals together is permitted by the NEC.**
 - A. True
 - B. False
7. **Circuit phase, neutral and ground conductors must run together other throughout the entire circuit.**
 - A. True
 - B. False
8. **Neutral to ground connections beyond the main service panel are recommended by the NEC.**
 - A. True
 - B. False

9. **If four (4) Amps are measured on a phase conductor and two (2) Amps are measured on its corresponding neutral, the following conditions may exist:**
- A. Multiple connections of separate branch line neutrals
 - B. Damaged wiring
 - C. Improper neutral to ground connections
 - D. All of the above
10. **In a balanced 2 conductor circuit, a hot wire carrying 10 amps will have a neutral carrying:**
- A. 5 amps
 - B. 10 amps
 - C. 20 amps
11. **Using a gaussmeter, a magnetic field of 10 milligauss (mG) is measured at one foot from an electrical circuit and at four feet away the field is 5 mG. This current is:**
- A. Net current
 - B. No net current
12. **Neutral currents may sometimes be found:**
- A. Gas & water pipes
 - B. Building steel
 - C. Grounds
 - D. All of the above
13. **A clamp-on Ammeter is used for measuring electrical currents (amperes) on conductors; what is a gauss meter used for measuring?**
- A. Resistance (ohms)
 - B. Magnetic fields
 - C. Voltage
 - D. Electric fields